

Broad Agency Announcement (BAA) N61339-01-R-0023 was publicized in the CBD on 01 March 2001 by the U.S. Army Program Executive Office for Simulation, Training and Instrumentation (formerly STRICOM). This notice calls for White Paper Submissions in reference to the research effort entitled, "Special Reconnaissance Simulator Research & Development Project." Technical Points of Contact: RDECOM-STC, Mr. James Grosse, (407) 384-3872; email: james.grosse@us.army.mil or Mr. Mark Stoklosa, (407) 384-3928; email: Mark.J.Stoklosa@us.army.mil (email contact preferred). Contractual Points of Contact: NAVAIR-Orlando-TSD, Ms. Dorothy Bryant, Contract Specialist, 12350 Research Parkway, Orlando, FL 32826 or Ms. Vanessa Dobson, Procuring Contracting Officer, 12350 Research Parkway, Orlando, FL 32826. **OBJECTIVE:** Provide a prototype that can immerse up to 3 Soldiers in a single virtual reality simulator for Special Operating Forces training in active reconnaissance in the search of high value targets and critical priority intelligence requirements to include WMD equipment and facilities. The system is desired to have as wide a field of view as possible; minimum desired is 270 degrees in vertical and horizontal with 360 degrees being the goal. The immersed Soldiers must be able to observe specific terrain areas, identify targets, use devices like binoculars, scopes, & Night Vision Goggles, perform day and night operations, and eventually maneuver in the system and engage reactive targets as required.

The working prototype will also have internal devices that replicate PRC-137F HF and DAMA satellite terminals operating in duplex mode. Message traffic will flow to and from the tender's station and the transceiver mock-ups within the simulator.

It is desired to be able to generate geo-specific databases that can be visualized in the immersive environment and used for OneSAF. Database must be generated within 24 hours of receiving NIMA and other imagery data. 3 initial databases with variable scenarios will be developed to demonstrate the technology (Prisoner of War camp, Weapons of Mass Destruction, and Command and Control Nodes).

The immersive system must be capable of ingesting the 3D visualization databases, networking with OneSAF Testbed Baseline (OTB) to generate the targets, and displaying high resolution targetry. System must be capable of displaying numerous types of OTB entities simultaneously to include individuals, moving and static vehicles and aircrafts, and weapons fire.

A phased approach to this prototype is sought.

PHASE I. The phase I effort will consist of a prototype to allow a three man team to perform stationary reconnaissance training mission. At least one database must be developed during this phase. Concepts and implementation of the processes to develop these databases will be worked during this phase. The prototype must perform, at a minimum, day operations and as a goal night operations. The system will allow the soldiers to observe specific terrain areas and clearly identify targets with specific markings through the use of devices like binoculars, scopes, & Night Vision Goggles. A minimum field of view for this system will be greater than 180 degrees in the horizontal and 135 degrees in the vertical. Some high fidelity targets will be available for viewing in the system. A demonstration will be conducted at the US Army's Simulation Technology Center in Orlando, FL or at Ft Bragg, NC.

Phase 1 will be a 1 year effort and funding may consist of approximately \$500,000.

Future Phases: Development will continue of the requirements described in Phase I to achieve the desired results. Follow-on phases will incorporate the technologies developed in preceding phases. Each future phase will consist of 1 year of effort and approximately \$500,000. The end product will consist of a prototype simulator installed at Ft Bragg, NC and or MacDill AFB, FL for demonstrations and evaluations.

PHASE II. The prototype will add the functionality of allowing the immersed Soldiers to engage targets and be engaged by target. A sniper rifle and M4 rifle will be available to engage the targets. Day and night operations are required for this phase. The ability to laze targets is required. A second database will be developed and the tools for creating future databases within 24 hours will be completed. The field of view of the system will be increased to 270 degrees in the horizontal and 180 degrees in the vertical. Additional high fidelity targets will be added. A demonstration will be conducted at the US Army's Simulation Technology Center in Orlando, FL or at Ft Bragg, NC.

PHASE III. The ability for the Soldier to maneuver through the environment will be added. The database will now be dynamic and not stationary. All night and zoom devices will be available in the system to identify and engage targets. Additional weapons may be added to the system. The third database will be developed using the processes developed in Phase II. The field of view will be increased to 270 degrees in the horizontal. Additional high fidelity targets may be added to the system. The prototype system will be installed and demonstrated at Ft Bragg, NC and or MacDill AFB, FL.

There will be at least 2 mandatory formal technical interchange meetings during Phase 1. This announcement constitutes the entire solicitation for this effort. No additional information is available, nor will a formal request-for-proposal or other solicitation regarding this Notice be issued. Requests for same will be disregarded.

WHITE PAPERS:

Any responsible offeror capable of satisfying the needs identified in this announcement may submit a white paper. White paper submissions are encouraged as early as possible but must be received at RDECOM STC no later than 12 September 2003. No extensions will be granted. White papers must address requirements for all 3 phases and shall not exceed 7 pages in length, excluding resumes. Only unclassified white papers will be accepted. The white papers will be reviewed to determine that the proposed effort is within the scope and interest of this solicitation. White papers will be evaluated by a technical review board using the following criteria listed in descending order of importance: (1) The overall scientific and/or technical merits of the proposal. (2) The potential contributions and/or transition of the effort to the Army simulation, training and instrumentation mission and the extent to which the research effort will contribute to high priority Army interests such as Future Combat Systems, (FCS). (3) The offeror's capabilities, related experience, facilities, techniques, or unique combination of these which are integral factors for achieving the proposal objectives. (4) The qualifications and experience of the proposed principal investigator, team leader, and other key personnel who are critical to the achievement of the proposal objectives. (5) The reasonableness and realism of proposed costs and fees, if any, and the availability of funds. Cost reasonableness and realism will be assessed, but this assessment is of a lower priority than the technical evaluation. To be eligible for award a white paper must be submitted. Offerors will be notified whether or not their white paper was favorably received on or about 3 October 2003. Favorable review of a white paper does not

constitute selection of the proposed effort for contract award and will not establish a binding commitment for the Government to fund the effort in whole or part. Upon notification, the Government will issue a request for proposal letter to the qualified offerors, who best meet the program objectives. If proposals are solicited, proposals are due NLT 5 November 2003.

This announcement is an expression of interest only and does not commit the government to reimburse any proposal preparation cost for responding. The cost of proposal preparation in response to this announcement are not considered an allowable expense to the normal bid and proposal indirect costs as specified in FAR 31.205-18. Any request for white paper or submission of a full proposal does not guarantee award. The Government reserves the right to cancel this requirement at any time and shall not be liable for any cost of proposal preparation or submission. There will be no other solicitation issued in regard to this requirement. Offerors should be alert for any BAA amendments that may be published. **MAIL WHITE PAPERS TO:** RDECOM STC, Attn: Mr. James Grosse, 12423 Research Parkway, Orlando, FL 32826 on or before 12 September 2003.

The addresses for this solicitation are:

Technical Points of Contact:

RDECOM-STC Technical Point of Contact is Mr. James Grosse, (407) 384-3872, james.grosse@us.army.mil or Mr. Mark Stoklosa, 407-384-3928, Mark.J.Stoklosa@us.army.mil

Contracting Point of Contact:

NAVAIR Orlando TSD, Ms. Dorothy Bryant, Contract Specialist , Code 25353, 12350 Research Parkway, Orlando, FL 32826 ATTN: BAA N61339-01-R-0023

This announcement may be retrieved via the WWW at URL

<http://www.peostri.army.mil/BAA/home.jsp>